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ABSTRACT

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Applying Motivation Theories to Individual Differences in the Classroom: A Social Learning Perspective

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Abstract

In the social learning perspective the anticipation of rewarding consequences serves as one source of motivation. A second results from the perception of a negative discrepancy between present capabilities and desired performance. To foster motivation it is necessary that persons accurately appraise their capabilities. Techniques for fostering accurate appraisal in a skill-development context include modeled demonstration of principles and their applications, effort attribution, and self-directed study.

Applying Motivation Theories to Individual Differences in the Classroom: A Social Learning Perspective

In this paper I will discuss motivation from a social learning perspective and offer some ways to foster its development. Although the research on which these remarks are based has been conducted with low achievers, the ideas are intended to apply across the achievement range.

According to social learning theory there are two important cognitively-based sources of motivation (Bandura, 1977a, 1977b). One source derives from the ability to represent future consequences in present thought. Individuals who anticipate that rewarding consequences will follow their efforts are likely to engage in a task more productively than those who see little or no value in the activity. Reinforcement, whether extrinsic or intrinsic, functions primarily as a motivational mechanism rather than a response strengthener.

The second source derives from the comparison of perceived performance capability to a desired standard. The perception of a negative discrepancy between present performance and a desired goal can motivate individuals to persist at a task until the goal is achieved. In the process of goal attainment, persons develop higher perceptions of capabilities that in turn often lead to the pursuit of even greater accomplishments.

Attempting to foster motivation among low achievers is a difficult process when viewed against these considerations. For example, children who know they will be rewarded by their teacher for good performances but who also know they lack the skills to succeed are apt to become demoralized. For many children the gap between perceived capability and some desired

standard is so great that it may appear insurmountable; as a result they may be reluctant to persist at a task and may quit easily in the face of minor difficulty.

The remainder of this paper will focus on one process hypothesized to influence motivation in an achievement setting; namely, accurate self-perception of capabilities. By this I mean personal judgments of one's capability to perform given activities. Such judgments are intended to be realistic and not represent what persons' wish or hope they can accomplish. I use the word capability rather than ability for a reason: What one does in any given situation is only partially influenced by one's ability or skill in that activity. Even persons highly skillful in a given activity may not perform it on any given occasion for a variety of reasons. They may, for example, perceive their ability lower than it objectively is, believe that insufficient rewards will be forthcoming from successful performance, hold an unrealistically high standard of competence, or expect negative social sanctions from successful performance.

The procedures that I have employed to measure self-perceived capability are simple and straightforward. For example, most of this research has been conducted in the context of children's arithmetic achievement (Bandura & Schunk, 1980; Schunk, 1979). Children are shown a series of cards, each containing two sample problems requiring the same number and type of operations. The cards are shown for brief exposures that are sufficient to illustrate the nature of the problems but too short to attempt solutions. A variety of problems requiring a range of operations can be displayed for any arithmetic skill. For each card children judge how sure they are that they can correctly solve problems of the type shown. Judgments are made on 10-unit scales ranging from complete assuredness

through moderate confidence to high uncertainty. Following this measurement, children are given arithmetic problems to solve that correspond in form and difficulty to those they were previously shown. The comparison of children's judgments for a given type of problem to their actual performance on the exemplar provides the measure of accuracy of self-perception.

Accuracy of self-perception is important to the development of motivation for at least two reasons. First, children who accurately appraise their capabilities are in a position to set reasonable goals for improvement. As mentioned earlier, the discrepancy between present capabilities and desired performance can motivate persons to strive toward improvement. Second, mismatches in either direction between capability appraisal and actual performance can have negative consequences. Children who overestimate their capabilities are apt to become demoralized at frequent failures at tasks beyond their range, while those who underestimate what they can do may be reluctant to attempt tasks and thereby preclude opportunities for skill development (Bandura, in press).

Research conducted over the past year with low-arithmetic achievers has demonstrated the utility of three procedures in fostering accurate capability self-appraisal. The common variable in these techniques is the provision of valid information concerning capabilities as these capabilities are improving. The improvement aspect is most important. When pretested, low-achieving children often show highly accurate self-appraisal: They judge they cannot solve problems and they subsequently do not solve them. With training, children become more skillful and it is important that they perceive this progress accurately.

The first technique is modeled demonstration of principles and their application (Schunk, 1979). In this technique an adult model verbalizes

general principles involved in problem solving and demonstrates their use on exemplars. Modeled demonstration can be used both for initial learning and for error correction. As a corrective technique the model demonstrates those aspects of performance that the child finds troublesome (Vasta, 1976). In division, for example, if a child does not "bring down" numbers, the model can focus correction explicitly on this aspect. The model might state, while pointing to the dividend, "We have to use all these numbers up one at a time and you have some left. Let's use this next one now." Research supports the idea that providing rules and exemplary modeling is more effective in concept acquisition than either technique in isolation (Rosenthal & Zimmerman, 1978).

In a recent study the effects of modeled demonstration were compared to those of written instruction in a division skill-development context with fourth-grade children (Schunk, 1979). Both treatments utilized the same instructional material and provided practice opportunities. For present purposes, the key variable is accuracy of self-appraisal. Modeled demonstration resulted in significantly more accurate self-appraisal of capabilities for classes of division problems included in training as well as types of problems that were conceptually and computationally more complex. In contrast, children who received written instruction containing explication of division principles and step-by-step worked examples significantly overestimated their capabilities as determined by subsequent posttest performance. These results suggest that modeling provided children with more valid performance information, possibly through focusing children's attention on the operations, tying these operations to abstract principles, and providing information on the source and remedy for deficiencies.

A second technique that can lead to more accurate capability self-

appraisal is effort attribution for achievement outcomes. For example, when children succeed at a difficult task an adult might comment, "You worked really hard," while if children experience difficulty the adult might respond with, "You need to work harder." The motivational effects of effort attribution derive from attribution theory, which postulates that outcomes linked to effort, a variable factor, should be more amenable to change than those linked to ability, a more stable factor (Weiner, 1979; Weiner, Frieze, Kukla, Reed, Rest, & Rosenbaum, 1971).

But effort attribution should lead to more accurate self-perception only if children can expend greater effort productively. Indeed, telling children to work harder when they are confused on how to proceed could prove discouraging. In the same study cited earlier (Schunk, 1979), effort attribution provided in the context of modeled demonstration led to significantly more accurate capability assessment than modeled demonstration alone. But providing effort attribution along with instructional narrative resulted in no benefit over the instruction alone. The effects in this case may have been due to children in the modeled demonstration condition developing a clearer perception of how effort can affect performance.

A third technique is self-directed study. In this procedure, children first receive instruction on arithmetic operations and then work alone on a series of pages containing practice problems. There are several reasons why this procedure should provide valid performance information, thereby promoting accurate self-appraisal of capabilities. First, the perception of progress is based on tangible pages; by keeping a pile of completed pages children always know how much they have accomplished. Second, this procedure minimizes social comparison; children are more likely to evaluate their progress against what they have previously accomplished and not against what someone else is doing. Third, success or difficulty

experienced alone fosters attribution to the self; thus children receive a more accurate picture of their strengths and weaknesses than if they received more extensive assistance.

In a recent study (Bandura & Schunk, 1980) self-directed study was applied in conjunction with goal-setting procedures in a subtraction skill-development context. Children who attempted to complete a minimum number of pages in a training packet each session appraised their capabilities significantly more accurately than children who were striving to complete the entire packet over a number of sessions or those who received no goal instructions. This result suggests that children in the short-term goal condition may have formed a clearer perception of their progress rate, and subsequently used such information to assess their capabilities.

I have suggested in this paper that accurate self-appraisal of capabilities is an important influence on children's motivation in achievement settings, and I have discussed some techniques for promoting accurate self-appraisal that I believe can be easily implemented in the classroom. Besides influencing children's work efforts, accurate self-appraisal should have other motivational by-products. Recent research suggests that perceptions of competence may influence the amount of interest that children demonstrate in an activity (Boggiano & Ruble, 1979). Clearly more research should be conducted exploring this link.

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